ABSTRACT

Methods and apparatus are described to compile and translate source code. In some embodiments, source code is compiled into source binary code for a source platform; an annotation section associated with the source binary code is generated, wherein the annotation section comprises an annotation for a scope, the scope comprising at least one block of the source binary code having at least one attribute to aid a translator optimization. If the scope comprises a plurality of blocks, the blocks have consecutive addresses with each other and have the at least one attribute in common. In the embodiments, the source binary code is further translated into target binary code for a target platform by utilizing the annotation section.